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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,597	04/01/2004	Jean-Pierre Rene Leon	403005/WEINSTEIN	5887
23548	7590	01/21/2005	EXAMINER	
LEYDIG VOIT & MAYER, LTD 700 THIRTEENTH ST. NW SUITE 300 WASHINGTON, DC 20005-3960			SHARP, JEFFREY ANDREW	
			ART UNIT	PAPER NUMBER
			3677	

DATE MAILED: 01/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/814,597

Applicant(s)

LEON ET AL.

Examiner

Jeffrey Sharp

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Status of Claims*

- [1] Claims 1-7 are pending.

### *Specification*

- [2] The disclosure is objected to because of the following informalities:

Page 4, paragraph 0031, line 5, the word '*can*' should be --cam--.

Page 6, paragraph 0037, line 10, the phrase '*which is now*' should be --which are now--

Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

- [3] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- [4] Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leon et al WO-00/49299 in view of Higdon et al. US-6,004,065.

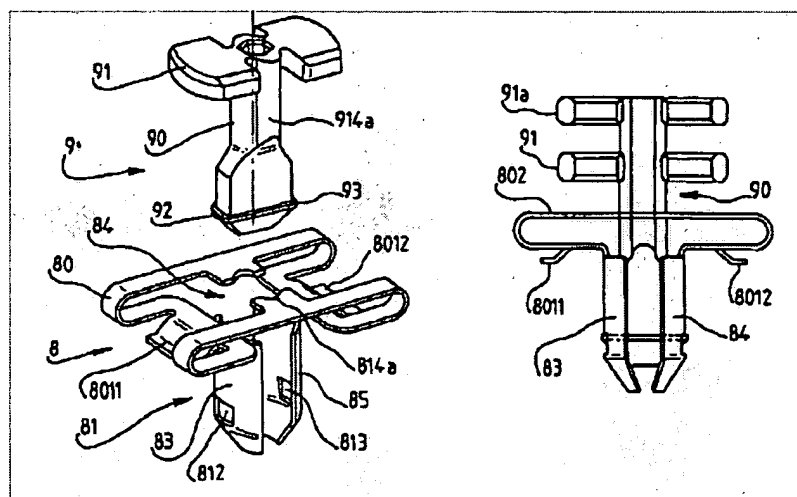
Leon et al. teach a female piece having a clasp, hollow elastically deflectable head, hollow foot portion having two tabs, and a male piece having a head (having a second head element (91), shaft, and cam portion. In general, Leon et al. teach substantially all of the claimed limitations, except for a **notch on the head** of the male piece that receives a **component** projecting from the head of the female piece -- said component comprising a resilient and axially-deflectable **finger** at its free end.

Higdon et al. teach a device for use in joining at least two panels together (Col 1 lines 7-9), comprising an anti-rotation apparatus. The anti-rotation apparatus has both *locked* and *unlocked* positions; both positions being facilitated by resilient, axially deflectable tab-like **components (70)** that extend from a female piece (30), and which have bent-like **finger portions** at their free ends. The fingers (70) are deflectable in an axial direction with respect to the shaft (54,60) axis of the male piece (50), and engage a **notch (68)** in the head (52) of the male piece (50), so as to prevent accidental rotation of the male piece (50) within the female piece (30). Accidental rotation of the male piece (50) is undesirable (as stated by Applicant in vibration environments), because it threatens the accidental. The male piece (50) is provided with a larger head portion (56) to prevent further insertion into the female piece (30). In order to achieve an *unlocked* position (i.e., position which allows rotation of the male piece (50) within the female piece (50)), the fingers (70) are axially deflected in between the two head portions (52, 56) and out of the notch (68) of the head (52). This is facilitated by ramp segments (66) which are not critical, but make the transition between *locked* and *unlocked* positions smoother. Note that Higdon et al. specifically disclose that clearance flats are necessary for the first head

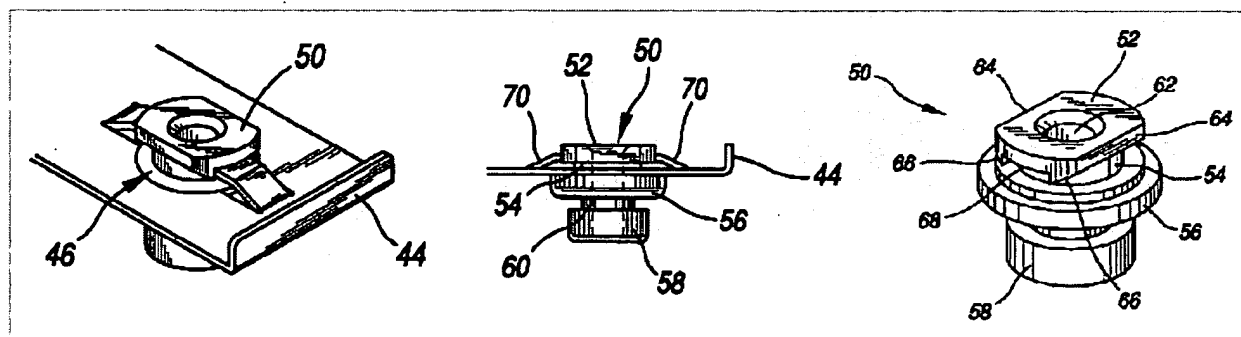
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portion (52) to clear the fingers (70) upon axial insertion of the male piece (50) into the female piece (30). See Higdon et al. Col 3 lines 26-38.

At the time of invention, it would have been obvious to one of ordinary skill in the art, to modify the fastening device taught by Leon et al., to comprise the anti-rotation device (i.e., 'resilient finger components' on a female piece, and a 'notch' on one of a plurality of head elements on a male piece), as suggested by Higdon et al. and substantially discussed above, so as to prevent accidental rotation of the male piece within the female piece when the male piece is in a fully inserted position. Accidental rotation would undesirably cause loosening or separation of the panels.



Leon et al WO-00/49299



Higdon et al. US-6,004,065

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*Conclusion*

[5] The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is as follows:

US 4630338 A	USPAT	Osterland; Robert W. et al.
US 5100273 A	USPAT	Vassiliou; Eustathios
US 5641255 A	USPAT	Tanaka; Tsutomu
US 5774949 A	USPAT	Cornell; Jeffrey J. et al.
US 5803532 A	USPAT	Karuppaswamy; Senthil Nathan et al.
US 6438804 B1	USPAT	Romero Magarino; Antonio
US 6481942 B2	USPAT	Tanaka; Tsutomu
US 6665914 B2	USPAT	Ogawa; Atsushi
US 6718599 B2	USPAT	Dickinson; Daniel James et al.
US 6827536 B1	USPAT	Leon; Jean-Pierre Rene et al.
US 20030143053 A1	US-PGPUB	Kanie, Hideki
US 5775860 A	USPAT	Meyer; Charles
US 5718549 A	USPAT	Noda; Yusuke et al.
US 4927287 A	USPAT	Ohkawa; Toshiya et al.
US 2571394 A	USPAT	TRAFTON WARREN L
US 2303148 A	USPAT	TINNERMAN GEORGE A
US 6398473 B1	USPAT	Kraus; Willibald
US 4878791 A	USPAT	Kurihara; Kazumasa et al.
US 4007516 A	USPAT	Coules; Ronald A.
US 6454507 B1	USPAT	Romero Magarino; Antonio
US 6616479 B1	USPAT	Jones; Dennis B.
US 6196756 B1	USPAT	Leverger; Eric
US 5201623 A	USPAT	Benedetti; Nicholas et al.
US 20040223826 A1	US-PGPUB	Leon, Jean-Pierre Rene et al.
US 5368427 A	USPAT	Pfaffinger; David A.
US 3645311 A	USPAT	Tinnerman; George A.
US 6353981 B1	USPAT	Smith; Edward John
US 6141837 A	USPAT	Wisniewski; David M.
US 5011355 A	USPAT	Motoshige; Inaba
US 20040170491 A1	US-PGPUB	Hulin, Martial et al.
US 20010041113 A1	US-PGPUB	Antonucci, Jeffrey L. et al.
US 20010036392 A1	US-PGPUB	Reddicliffe, Edward
US 6773215 B2	USPAT	Cuva; William J. et al.
US 6679646 B2	USPAT	Quardt; Dirk et al.
US 6540463 B2	USPAT	Ward; Michael E.
US 6267543 B1	USPAT	David; Anthony Joseph et al.

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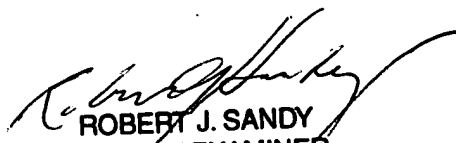
US 5167465 A	USPAT	Inui; Syuji et al.
US 5346349 A	USPAT	Giovannetti; Antonio
US 4647262 A	USPAT	Yokota; Hiroshi
US 4129395 A	USPAT	Theurer; John et al.
US 3986780 A	USPAT	Nivet; Andre
US 3964364 A	USPAT	Poe; L. Richard
US 3443783 A	USPAT	FISHER JULIAN V
US 2504358 A	USPAT	SWANSON FORREST R

[6] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Sharp whose telephone number is (703) 305-0426. The examiner can normally be reached on 7:30 am - 5:00 pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached on (703) 306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAS

  
ROBERT J. SANDY  
PRIMARY EXAMINER